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SUMMARY
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UNITED NATIONS CONFERENCE
ON THE APPLICATION OF SCIENCE AND TECHNOLOGY
FOR THE BENEFIT OF THE LESS DEVELOPED AREAS

SUMMARY

Agenda Item: D.10

United Kingdom

ENGINEERING PRODUCTION

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D.10.

D. 10. Engineering Production

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S U M M A R Y

Engineering Production is concerned with the planning, organising and control of manufacturing industry. It is a study embracing all aspects of production - technical, human and economic - and its emergence as a unified science and technology is mainly due to the considerable research effort in this field in recent years. This research has been directed in part to an understanding of the nature, characteristics and interaction of the various agents of production and of the principles upon which the planning, co-ordination and control of production should be based, and in part to the development of a range of productivity improvement techniques.

While there has been a tendency to concentrate on developing and refining techniques to perfect the more advanced and highly developed industries, considerable improvements in productivity may be effected by the use of less sophisticated techniques in small-scale and under developed industries. There is conclusive evidence that the science and technology of Engineering Production are of universal application.

The techniques employed range from elementary method study and process planning to ergonomics studies, in which physiological and psychological factors are weighed against technical requirements and economic restrictions, and to the systematic analysis of complete manufacturing systems by use of the more rigorous tools of operational research.

Although industrial advance is usually assessed in terms of technical development, it by no means follows that such development automatically leads to increased production or productivity. Nor is the organisation approaching complete automation necessarily the most efficient. On the contrary, more efficient use of labour - more effectively trained - with a modest level of mechanisation, can substantially raise the level of productivity in the less developed areas, provided the overall production strategy has been scientifically determined.

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